

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.

L Number	Hits	Search Text	DB	Time stamp
1	0	(location adj based) and (located adj object) and disseminating and (active adj map) and node and (tree or hierarchy)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:15
2	0	(location adj based) and (located adj object) and disseminating and (active adj map) and node and (tree or hierarchy\$6)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:37
3	31	(location adj based) and (located adj object)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:27
4	5	((location adj based) and (located adj object)) and node and (tree or hierarchy\$6)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:27
5	225	context adj aware	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:27
6	46	(context adj aware) and node and (tree or hierarchy\$6)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:27
7	29	(context adj aware) and node same (tree or hierarchy\$6)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:31
8	1462737	(context adj aware) and node same (tree or hierarchy\$6) sale link\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:32
9	23	(context adj aware) and node same (tree or hierarchy\$6) and link\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:32
10	12	(context adj aware) and node same (tree or hierarchy\$6) same link\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:34
11	4461	node same (tree or hierarchy\$6) same link\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:43
12	3369	(node same (tree or hierarchy\$6) same link\$3) and (locat\$5 or mobile) computing and (active adj map)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:35
13	0	(node same (tree or hierarchy\$6) same link\$3) and (locat\$5 or mobile) and computing and (active adj map)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:35

14	2	(node same (tree or hierarch\$6) same link\$3) and (active adj map)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:36
15	174	(active adj map)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:37
16	0	((active adj map)) and (location adj based) and (located adj object)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:37
18	0	((active adj map)) and (located adj object)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:37
17	8	((active adj map)) and (location adj based)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:37
19	2	((active adj map)) and node same (tree or hierarch\$6) same link\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:39
20	14	((active adj map)) and node and (tree or hierarch\$6) and link\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:41
21	18	((active adj map)) and node and (tree or hierarch\$6)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:42
22	0	(((active adj map)) and (located adj object)) and (node or (tree or hierarch\$6)) same link\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:42
23	15	((active adj map)) and node same (tree or hierarch\$6)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:43
24	368	(node same (tree or hierarch\$6) same link\$3) and (second or "other" or "another") adj2 (tree or hierarch\$6)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:44
26	44	((node same (tree or hierarch\$6) same link\$3) and (second or "other" or "another") adj (tree or hierarch\$6)) and (goods! or services! or food or bank\$3) same node	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:50
27	44	(((node same (tree or hierarch\$6) same link\$3) and (second or "other" or "another") adj (tree or hierarch\$6)) and (goods! or services! or food or bank\$3) same node) and first same second	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 08:00

28	7	((node same (tree or hierarch\$6) same link\$3) and (second or "other" or "another") adj (tree or hierarch\$6)) and ((goods! or food) and (services! or bank\$3)) same node	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:51
25	187	(node same (tree or hierarch\$6) same link\$3) and (second or "other" or "another") adj (tree or hierarch\$6)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:59
29	114	(node same (tree or hierarch\$6) same link\$3) and (second or "other" or "another") adj (tree)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 07:59
30	110	((node same (tree or hierarch\$6) same link\$3) and (second or "other" or "another") adj (tree)) and (first same second) same tree	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 08:00
31	52	((node same (tree or hierarch\$6) same link\$3) and (second or "other" or "another") adj (tree)) and (first adj tree) same (second adj tree)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 08:01
32	16	((node same (tree or hierarch\$6) same link\$3) and (second or "other" or "another") adj (tree)) and (first adj tree) same (second adj tree) same link\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 08:04
33	112	((node same (tree or hierarch\$6) same link\$3) and (second or "other" or "another") adj (tree)) and (first adj2 tree) same (second adj2 tree) same link\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 08:06
34	112	((node same (tree or hierarch\$6) same link\$3) and (second or "other" or "another") adj (tree)) and (first adj2 tree) same (second adj2 tree) same link\$3) not (microsoft).as.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 08:06
35	21	((node same (tree or hierarch\$6) same link\$3) and (second or "other" or "another") adj (tree)) and (first adj2 tree) same (second adj2 tree) same link\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 08:19
36	21	((node same (tree or hierarch\$6) same link\$3) and (second or "other" or "another") adj (tree)) and (first adj2 tree) same (second adj2 tree) same link\$3) not (microsoft).as.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 08:06
37	1	((node same (tree or hierarch\$6) same link\$3) and (second or "other" or "another") adj (tree)) and (first adj hierarch\$6 adj tree) same (second adj hierarch\$6 adj tree) same link\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 08:07
38	1	(first adj hierarch\$6 adj tree) same (second adj hierarch\$6 adj tree) same link\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 08:17
39	57	(node same (tree or hierarch\$6) same link\$3) and second adj6 context	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 08:18

40	1	((node same (tree or hierarch\$6) same link\$3) and second adj6 context) and (first adj2 tree) same (second adj2 tree) same link\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 08:21
42	7	(node same (tree or hierarch\$6) same link\$3) and context same (goods! same services!) same node	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 08:20
43	9	(node same (tree or hierarch\$6) same link\$3) and context same (goods! and services!) same node	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 08:20
41	60	(node same (tree or hierarch\$6) same link\$3) and context same location same node	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 08:21
44	1	((node same (tree or hierarch\$6) same link\$3) and context same location same node) and (first adj2 tree) same (second adj2 tree) same link\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 08:22
45	9	((node same (tree or hierarch\$6) same link\$3) and context same location same node) and (first adj2 tree) and (second adj2 tree)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/09/16 08:22

Google™ Advanced Search

[Advanced Search Tips](#) | [About Google](#)

Find results with **all** of the words

with the **exact phrase**

with **at least one** of the words

without the words

Language Return pages written in

File Format ☐ Only ☐ return results of the file format

Date Return web pages updated in the

Numeric Range Return web pages containing numbers between and

Occurrences Return results where my terms occur

Domain ☐ Only ☐ return results from the site or domain
e.g. [google.com](#), [.org](#) [More info](#)

SafeSearch ☒ No filtering ☐ Filter using [SafeSearch](#)

Froogle Product Search (BETA)

Products Find products for sale

To browse for products, start at the [Froogle home page](#)

Page-Specific Search

Similar Find pages similar to the page
e.g. [www.google.com/help.html](#)

Links Find pages that link to the page

Topic-Specific Searches

New! [Local](#) - Find local businesses and services on the web.

[Catalogs](#) - Search and browse mail-order catalogs online

[Apple Macintosh](#) - Search for all things Mac

[BSD Unix](#) - Search web pages about the BSD operating system

[Linux](#) - Search all penguin-friendly pages

[Microsoft](#) - Search Microsoft-related pages

[U.S. Government](#) - Search all .gov and .mil sites

[Universities: Stanford, Brown, BYU, & more](#) - Narrow your search to a specific school's website

IEEE HOME | SEARCH IEEE | SHOP | WEB ACCOUNT | CONTACT IEEE



Membership | Publications/Services | Standards | Conferences | Careers/Jobs

Welcome
United States Patent and Trademark Office

» Se

[Help](#) | [FAQ](#) | [Terms](#) | [IEEE Peer Review](#)

Quick Links

Welcome to IEEE Xplore®

- ☐ Home
- ☐ What Can I Access?
- ☐ Log-out

Tables of Contents

- ☐ Journals & Magazines
- ☐ Conference Proceedings
- ☐ Standards

Search

- ☐ By Author
- ☐ Basic
- ☐ Advanced

Member Services

- ☐ Join IEEE
- ☐ Establish IEEE Web Account
- ☐ Access the IEEE Member Digital Library

IEEE Enterprise

- ☐ Access the IEEE Enterprise File Cabinet

Your search matched **0** of **1071730** documents.A maximum of **500** results are displayed, **15** to a page, sorted by **Relevance Descending** order.

Refine This Search:

You may refine your search by editing the current search expression or enter a new one in the text box.

☐ Check to search within this result set

Results Key:

JNL = Journal or Magazine **CNF** = Conference **STD** = Standard

Results:

No documents matched your query.

Print Format

[Home](#) | [Log-out](#) | [Journals](#) | [Conference Proceedings](#) | [Standards](#) | [Search by Author](#) | [Basic Search](#) | [Advanced Search](#) | [Join IEEE](#) | [Web Account](#) | [New this week](#) | [OPAC Linking Information](#) | [Your Feedback](#) | [Technical Support](#) | [Email Alerting](#) | [No Robots Please](#) | [Release Notes](#) | [IEEE Online Publications](#) | [Help](#) | [FAQ](#) | [Terms](#) | [Back to Top](#)

Copyright © 2004 IEEE — All rights reserved



[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

Search: ☒ The ACM Digital Library ☐ The Guide

+location-based +located-object +active +map +context-aware



THE ACM DIGITAL LIBRARY



[Feedback](#) [Report a problem](#) [Satisfaction survey](#)

Terms used

location based located object active map context aware tree or hierarchy node

Found 1 of 142,346

Sort results by

relevance



[Save results to a Binder](#)

Try an [Advanced Search](#)

Try this search in [The ACM Guide](#)

Display results

expanded form



[Search Tips](#)

☐ Open results in a new window

Results 1 - 1 of 1

Relevance scale ☐ ☐ ☐ ☐ ☐

1 [Exploiting space and location as a design framework for interactive mobile systems](#)

Alan Dix, Tom Rodden, Nigel Davies, Jonathan Trevor, Adrian Friday, Kevin Palfreyman
September 2000 **ACM Transactions on Computer-Human Interaction (TOCHI)**, Volume 7
Issue 3

Full text available: [pdf\(282.97 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This article considers the importance of context in mobile systems. It considers a range of context-related issues and focus on location as a key issue for mobile systems. A design framework is described consisting of taxonomies of location, mobility, population, and device awareness. The design framework informs the construction of a semantic model of space for mobile systems. The semantic model is reflected in a computational model built on a distributed platform that allows contextual info ...

Keywords: awareness, context information, design framework, location-sensitive applications, mobile systems, platform support, shared interaction, virtual space

Results 1 - 1 of 1

The ACM Portal is published by the Association for Computing Machinery. Copyright © 2004 ACM, Inc.

[Terms of Usage](#) [Privacy Policy](#) [Code of Ethics](#) [Contact Us](#)

Useful downloads:



[Adobe Acrobat](#)



[QuickTime](#)



[Windows Media Player](#)



[Real Player](#)



[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

Search: ☒ The ACM Digital Library ☐ The Guide

(location <near/2> based) and (located <near/2> object) and



THE ACM DIGITAL LIBRARY



[Feedback](#) [Report a problem](#)

Terms used

location near/2 based and located near/2 object and disseminating and active near/2 map and node and tree

Sort results by

Display results

[Save results to a Binder](#)

[Search Tips](#)

☐ [Open results in a new window](#)

Try an [Advanced](#)
Try this search

Results 1 - 20 of 200

Best 200 shown

Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

1 [Exploiting space and location as a design framework for interactive mobile systems](#)

Alan Dix, Tom Rodden, Nigel Davies, Jonathan Trevor, Adrian Friday, Kevin Palfreyman

September 2000 **ACM Transactions on Computer-Human Interaction (TOCHI)**, Volume 7 Issue 3

Full text available: pdf(282.97 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index](#)

This article considers the importance of context in mobile systems. It considers a range of context location as a key issue for mobile systems. A design framework is described consisting of taxonomic population, and device awareness. The design framework informs the construction of a semantic model. The semantic model is reflected in a computational model built on a distributed platform that allows

Keywords: awareness, context information, design framework, location-sensitive applications, mobile shared interaction, virtual space

2 [Data-centric storage in sensornets with GHT, a geographic hash table](#)

Sylvia Ratnasamy, Brad Karp, Scott Shenker, Deborah Estrin, Ramesh Govindan, Li Yin, Fang Yu

August 2003 **Mobile Networks and Applications**, Volume 8 Issue 4

Full text available: pdf(255.10 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index](#)

Making effective use of the vast amounts of data gathered by large-scale sensor networks (sensing, organizing, and energy-efficient data dissemination algorithms. For sensornets, where the content is more important than the identity of the node that gathers them, researchers have found it useful to move away from communication abstraction and instead adopt abstractions that are more data-centric. This approach

Keywords: algorithms, distributed systems, performance, sensor networks

3 [Fast detection of communication patterns in distributed executions](#)

Thomas Kunz, Michiel F. H. Seuren

November 1997 **Proceedings of the 1997 conference of the Centre for Advanced Studies on C**

Full text available: pdf(4.21 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index](#)

Understanding distributed applications is a tedious and difficult task. Visualizations based on process diagrams to obtain a better understanding of the execution of the application. The visualization tool we use is at the University of Waterloo. However, these diagrams are often very complex and do not provide an overview of the application. In our experience, such tools display repeated occurrences of non-trivial



[Subscribe \(Full Service\)](#) [Register \(Limited Service, Free\)](#) [Login](#)

Search: ☒ The ACM Digital Library ☐ The Guide

(location <near/2> based) and (located <near/2> object) and



THE ACM DIGITAL LIBRARY

[Feedback](#) [Report a problem](#) [Satisfac](#)

Terms used

location near/2 based and located near/2 object and disseminating and active near/2 map and node and tree

Sort results by

Display results

[Save results to a Binder](#)

[Search Tips](#)

☐ [Open results in a new window](#)

Try an [Advanced Search](#)

Try this search in [The AC](#)

Results 1 - 20 of 200

Result page: [1](#) [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) [next](#)

Best 200 shown

Reli

1 [Fast detection of communication patterns in distributed executions](#)

Thomas Kunz, Michiel F. H. Seuren

November 1997 **Proceedings of the 1997 conference of the Centre for Advanced Studies on C research**

Full text available: [pdf\(4.21 MB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Understanding distributed applications is a tedious and difficult task. Visualizations based on proc diagrams are often used to obtain a better understanding of the execution of the application. The tool we use is Poet, an event tracer developed at the University of Waterloo. However, these diag very complex and do not provide the user with the desired overview of the application. In our exp tools display repeated occurrences of non-trivial commun ...

2 [Astrolabe: A robust and scalable technology for distributed system monitoring, management mining](#)

Robbert Van Renesse, Kenneth P. Birman, Werner Vogels

May 2003 **ACM Transactions on Computer Systems (TOCS)**, Volume 21 Issue 2

Full text available: [pdf\(341.62 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Scalable management and self-organizational capabilities are emerging as central requirements for of large-scale, highly dynamic, distributed applications. We have developed an entirely new distril information management system called Astrolabe. Astrolabe collects large-scale system state, per updates and providing on-the-fly attribute aggregation. This latter capability permits an applicatic resource, and also offers a scalable way to track sys ...

Keywords: Aggregation, epidemic protocols, failure detection, gossip, membership, publish-subs

3 [The design and implementation of an intentional naming system](#)

William Adjie-Winoto, Elliot Schwartz, Hari Balakrishnan, Jeremy Lilley

December 1999 **ACM SIGOPS Operating Systems Review , Proceedings of the seventeenth AC on Operating systems principles**, Volume 33 Issue 5

Full text available: [pdf\(1.77 MB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [citings](#), [index ter](#)

This paper presents the design and implementation of the Intentional Naming System (INS), a re: and service location system for dynamic and mobile networks of devices and computers. Such en: require a naming system that is (i) expressive, to describe and make requests based on specific p